

OIFE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/829,481

DATE: 04/23/2001

TIME: 13:25:47

Input Set : A:\BB1441 US NA Seq Listing.txt

Output Set: N:\CRF3\04232001\I829481.raw

ENTERED

```

2 <110> APPLICANT: Presnail, James
3      Weng, Zude
4      Wong, James
6 <120> TITLE OF INVENTION: Arthropod Defensins
8 <130> FILE REFERENCE: BB1441 US NA
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/829,481
C--> 11 <141> CURRENT FILING DATE: 2001-04-10
13 <150> PRIOR APPLICATION NUMBER: 60/197279
14 <151> PRIOR FILING DATE: 2000-04-14
16 <160> NUMBER OF SEQ ID NOS: 11
18 <170> SOFTWARE: Microsoft Office 97
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 461
22 <212> TYPE: DNA
23 <213> ORGANISM: Scolopendra canidens DS
25 <220> FEATURE:
26 <221> NAME/KEY: unsure /
27 <222> LOCATION: (408)
29 <220> FEATURE:
30 <221> NAME/KEY: unsure /
31 <222> LOCATION: (439)
33 <220> FEATURE:
34 <221> NAME/KEY: unsure
35 <222> LOCATION: (455)
37 <400> SEQUENCE: 1
38 gcaatttcaa aatttttttc ttttctttct ttacgcagtg ctgggcaaca tgaagactgt 60
39 gtatgttata ttcttagttg ctcttcttctg attagcatta gctggaactt acgtggaagc 120
40 tggtttcggc tgccccgggg accaatatga atgcaataga cattgcaggg gtaatggatt 180
41 tactgggggt tactgcactg gatttctgaa gtacacgtgt aaatgctaca catgatcaaa 240
42 atatgatatt ctggcagttc tccaatttca acaaagggtc tacaacagtc tacagtaaaa 300
43 tagaaaatta cgaaatctac agccttgacac tcacattaat acctttggga tgtcattgaa 360
W--> 44 atttgcattg ttaataataa tacatgtttg gtttttttca gagaataant tatagaaaca 420
W--> 45 aaatttttaa ataatggnt ataatttga taaanaaaaa a 461
47 <210> SEQ ID NO: 2
48 <211> LENGTH: 61
49 <212> TYPE: PRT
50 <213> ORGANISM: Scolopendra canidens DS
52 <400> SEQUENCE: 2
53 Met Lys Thr Val Tyr Val Ile Phe Leu Val Ala Leu Leu Val Leu Ala
54 1 5 10 15
55 Leu Ala Gly Thr Tyr Val Glu Ala Gly Phe Gly Cys Pro Gly Asp Gln
56 20 25 30
57 Tyr Glu Cys Asn Arg His Cys Arg Gly Asn Gly Phe Thr Gly Gly Tyr
58 35 40 45
59 Cys Thr Gly Phe Leu Lys Phe Thr Cys Lys Cys Tyr Thr
60 50 55 60
62 <210> SEQ ID NO: 3

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63 <211> LENGTH: 406
64 <212> TYPE: DNA
65 <213> ORGANISM: Vaejovis carolinianus
67 <400> SEQUENCE: 3
68 ctctactaca atcactaagt tctttctcca ctcagcttca agaatgaaat ccatagctat 60
69 tatttttcato gttcttgttg ccttctgtat tttggaggat gggattgtag aagctggttt 120
70 tggatgtccc tttaatgcag gaaaatgccca tagacattgc aaaagtattc gtcgtagagg 180
71 aggccttttgc agaggaactt tcaggacaac ctgcgtttgc tataaggtgaa aatccgattt 240
72 atttgccata atggagaccc gtttttattg aatatcgta gtttccaatt aaagtcattt 300
73 cgagccatac tgaataattt tgtaatctaa caacagatgc aatagtttaa ataaacttat 360
74 acttaacttt taaaaaaaaa aaaaaaaaaa aaaaaaa 406
76 <210> SEQ ID NO: 4
77 <211> LENGTH: 61
78 <212> TYPE: PRT
79 <213> ORGANISM: Vaejovis carolinianus
81 <400> SEQUENCE: 4
82 Met Lys Ser Ile Ala Ile Ile Phe Ile Val Leu Val Ala Phe Cys Ile
83   1           5           10           15
84 Leu Glu Asp Gly Ile Val Glu Ala Gly Phe Gly Cys Pro Phe Asn Ala
85           20           25           30
86 Gly Lys Cys His Arg His Cys Lys Ser Ile Arg Arg Arg Gly Gly Phe
87           35           40           45
88 Cys Arg Gly Thr Phe Arg Thr Thr Cys Val Cys Tyr Arg
89   50           55           60
91 <210> SEQ ID NO: 5
92 <211> LENGTH: 386
93 <212> TYPE: DNA
94 <213> ORGANISM: Argiope sp.
96 <220> FEATURE:
97 <221> NAME/KEY: unsure/
98 <222> LOCATION: (351)
100 <220> FEATURE:
101 <221> NAME/KEY: unsure /
102 <222> LOCATION: (364)..(365)
104 <220> FEATURE:
105 <221> NAME/KEY: unsure /
106 <222> LOCATION: (386)
108 <400> SEQUENCE: 5
109 catttccaaa aaaatgaatg cgagagtcct gttgttgatc tgcctagtcg tctgtgcttt 60
110 tgccacagtg gccgtggaag ctggtttcgg ctgccccttc gaccagatgc agtgtcacia 120
111 tcattgcagg agcatcaa atacagggagg atactgcacc aacttattca agcgcacctg 180
112 caagtgttac ggatgatgac cccctcccc tctcagacag gagccacac ctttcattga 240
113 catccgattc cgattttcca aatgcaaatt gtaacacatg atgaatttga tgcaagtgcc 300
W--> 114 ttaaaatttaa ataaatttga ttttacattt taaaaaaaaa aaaaaaaaaa naaaaaaaaa 360
W--> 115 aaannaaaaa aaaaaaaaaa aaaaaaa 386
117 <210> SEQ ID NO: 6
118 <211> LENGTH: 60
119 <212> TYPE: PRT
120 <213> ORGANISM: Argiope sp.

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122 <400> SEQUENCE: 6
123 Met Asn Ala Arg Val Leu Leu Leu Ile Cys Leu Val Val Cys Ala Phe
124   1           5           10           15
125 Ala Thr Val Ala Val Glu Ala Gly Phe Gly Cys Pro Phe Asp Gln Met
126           20           25           30
127 Gln Cys His Asn His Cys Arg Ser Ile Lys Tyr Arg Gly Gly Tyr Cys
128           35           40           45
129 Thr Asn Leu Phe Lys Arg Thr Cys Lys Cys Tyr Gly
130           50           55           60
132 <210> SEQ ID NO: 7
133 <211> LENGTH: 351
134 <212> TYPE: DNA
135 <213> ORGANISM: Argiope sp.
137 <400> SEQUENCE: 7
138 cttggttctg tcgacatttc caaaaaaatg aatgcgagag ttctgttggt gatctgccta 60
139 gtcgtctgtg cttttgccac agtgaccgtg gaagctgggt tcggtgccc cttcgaccag 120
140 atgcagtgtc acaatcattg caggagcatc aaatataggg gaggatactg caccaactta 180
141 ttcaagcgca cctgcaagtg ttacggatga tgacccccct cccctctcag acaggagccc 240
142 tcacctttca ctgacatccg attccgattt tccaaatgca aattgtaaca catgatgaat 300
143 ttgattcaag tgcccttaaa tttaaataaa ttgatttta cattttaaaa a 351
145 <210> SEQ ID NO: 8
146 <211> LENGTH: 60
147 <212> TYPE: PRT
148 <213> ORGANISM: Argiope sp.
150 <400> SEQUENCE: 8
151 Met Asn Ala Arg Val Leu Leu Leu Ile Cys Leu Val Val Cys Ala Phe
152   1           5           10           15
153 Ala Thr Val Thr Val Glu Ala Gly Phe Gly Cys Pro Phe Asp Gln Met
154           20           25           30
155 Gln Cys His Asn His Cys Arg Ser Ile Lys Tyr Arg Gly Gly Tyr Cys
156           35           40           45
157 Thr Asn Leu Phe Lys Arg Thr Cys Lys Cys Tyr Gly
158           50           55           60
160 <210> SEQ ID NO: 9
161 <211> LENGTH: 537
162 <212> TYPE: DNA
163 <213> ORGANISM: Argiope sp.
165 <220> FEATURE:
166 <221> NAME/KEY: unsure /
167 <222> LOCATION: (429)
169 <220> FEATURE:
170 <221> NAME/KEY: unsure /
171 <222> LOCATION: (498)
173 <220> FEATURE:
174 <221> NAME/KEY: unsure /
175 <222> LOCATION: (524)
177 <400> SEQUENCE: 9
178 tttatctatt ttttgatgtg cgtgactttc atcatggctc ttctgtatcc cccacttggt 60
179 gatgcaggat tcgggtgtcc tttctgccaa ggggaatgta accttactg caagcacgtg 120

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180 gtcaaggcaa ggggcggatt ttgcacaggt gctttcaaac aaacctgcaa atgcaaccga 180
181 tgattacctt tccagacaac atgaaacacg gacgatgggt ctaactttat ccagacatcg 240
182 gatgccggat taatgatatt aactgaaat gttcatttaa tgtataccta ttaagattt 300
183 aaaggcagtg atgatttaat tttaatatta agttgtacaa gtaacattct aagcaaaata 360
184 aaataagatt tacgtttttt ttttttttaa taaaataaa ttaatgggc cttccgtac 420
W--> 185 tgaataaana taactaaaag atagaaacaa tccgggttac accgatttga actcaaatca 480
W--> 186 tgtaatggtt taaagggncg acaagaccta cttttaaat tacngatcag taaagtt 537
188 <210> SEQ ID NO: 10
189 <211> LENGTH: 55
190 <212> TYPE: PRT
191 <213> ORGANISM: Argiope sp.
193 <400> SEQUENCE: 10
194 Met Cys Val Thr Phe Ile Met Ala Leu Ser Tyr Pro Pro Leu Val Asp
195 1 5 10 15
196 Ala Gly Phe Gly Cys Pro Phe Cys Gln Gly Glu Cys Asn Leu His Cys
197 20 25 30
198 Lys His Val Val Lys Ala Arg Gly Gly Phe Cys Thr Gly Ala Phe Lys
199 35 40 45
200 Gln Thr Cys Lys Cys Asn Arg
201 50 55
203 <210> SEQ ID NO: 11
204 <211> LENGTH: 37
205 <212> TYPE: PRT
206 <213> ORGANISM: Androctonus australis hector
208 <400> SEQUENCE: 11
209 Gly Phe Gly Cys Pro Phe Asn Gln Gly Ala Cys His Arg His Cys Arg
210 1 5 10 15
211 Ser Ile Arg Arg Arg Gly Gly Tyr Cys Ala Gly Leu Phe Lys Gln Thr
212 20 25 30
213 Cys Thr Cys Tyr Arg
214 35
216 BB1441

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VERIFICATION SUMMARY

DATE: 04/23/2001

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TIME: 13:25:48

Input Set : A:\BB1441 US NA Seq Listing.txt

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L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:44 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
L:44 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:45 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
L:45 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:114 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:5
L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:115 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:5
L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:185 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:9
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:186 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:9
L:186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9